



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/773,119	02/05/2004	Guido Desie	27500-197	3253

7590 02/13/2006

Joseph T. Guy Ph.D.  
Nexsen Pruet Jacobs & Pollard LLP  
201 W. McBee Avenue  
Greenville, SC 29603

EXAMINER
----------

NATALINI, JEFF WILLIAM

ART UNIT	PAPER NUMBER
----------	--------------

2858

DATE MAILED: 02/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/773,119

Applicant(s)

DESIE ET AL.

Examiner

Jeff Natalini

Art Unit

2858

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to because the grounded means should be shown grounded, an earth ground should be shown connected to the drum (1) in the figure, also in order for one of ordinary skill to easily look at the figure and understand the invention, all the boxes should be label with what they correspond to (for example box 8 should be labeled Voltmeter, box 13 should state DAQ card). Please do this with at least boxes 8, 11, 12, 13, and 14, as well as 2 and 10 if possible. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 3-9, 16, 17, 19, 21, and 23-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Seaver et al. (US Pub 2002/0192360).

In regard to claim 1, Seaver et al. discloses an apparatus for evaluating the triboelectrical properties (pg 13 paragraph 115) of at least two samples (figure 20 shows the properties of webs), comprising: a grounded means (pg 11 para 105 line 4-6; fig 3a (14))) for holding a material in sheet form (pg 11 para 105 lines 1-4) comprising a support provided (the grounded drum, fig 3a (14)) on at least one surface thereof with at least two samples each in at least one predefined region thereof (multiple samples- paragraph 106 table I, shows that different speeds are used to create multiple thicknesses of the web samples- the limitation "predefined region" is considered the whole drum as "region" does not provide any specific placement of the samples); a charging means for tribocharging said at least two samples (paragraph 115 states the rollers pass a triboelectric charge to the samples-fig 3a (26)); and a means (7) for measuring an electrical property of said at least two samples (pg 12 para 107 line 1-4, properties shown in figure 20).

In regard to claim 3, Seaver et al. discusses wherein said grounded means for holding said support is a rotatable drum (pg 11 para 105 line 4-6; fig 3a (14)).

In regard to claims 4, 5, 16, and 17, Sever et al. discloses wherein a computer is able to perform a calculation on said measured electrical property (pg 9 para 90 lines 10-25).

In regard to claim 6, 19, 20, and 21, Seaver et al. discloses a grounded rotatable drum for holding the support in sheet form (pg 11 para 105 line 4-6; fig 3a (14)); a charging roller to tribocharge the sample (paragraph 115 states the rollers pass a triboelectric charge to the samples-fig 3a (26)); a measuring probe connected to a voltmeter for measuring electrostatic potentials (pg 12 para 107 line 1-5); a computer for handling outgoing and incoming data (pg 9 para 90 lines 10-25).

In regard to claim 7, Seaver et al. discloses wherein a software of a computer controls the rotation speed of said rotatable drum and the linear translation speed of said measuring means for measuring said electrical property across said support in sheet form (pg 9 para 90, and pg 11 para 106).

In regard to claims 8, 9, and 23-27, Seaver et al. discloses a means for post-treatment of the samples, wherein the means is a UV-curing means (pg 12 para 110 line 1-11).

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2858

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2, 13-15, 18, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seaver et al. (US Pub 2002/0192360) in view of Huizinga et al. (4328280).

In regard to claim 2, Seaver et al. discloses all that is disclosed above in claim 1.

Seaver et al. lacks wherein one sample is a test sample and the other is a reference sample.

Huizinga et al. teaches wherein two samples triboelectric charge is evaluated and wherein one sample is a test sample and the other is a reference sample (col 7 line 62 – col 8 line 3).

It would have been obvious to one with ordinary skill in the art at the time the invention was made for Seaver et al. to have one sample as a test sample and the other as a reference sample as taught by Huizinga et al. in order to determine the effect of multiple surface treatments of samples (col 8 line 30-40).

In regard to claim 13, Seaver et al. discloses a grounded rotatable drum for holding the support in sheet form (pg 11 para 105 line 4-6; fig 3a (14))

In regard to claims 14 and 15, Sever et al. discloses wherein a computer is able to perform a calculation on said measured electrical property (pg 9 para 90 lines 10-25).

In regard to claim 18, Seaver et al. discloses a grounded rotatable drum for holding the support in sheet form (pg 11 para 105 line 4-6; fig 3a (14)); a charging roller to tribocharge the sample (paragraph 115 states the rollers pass a triboelectric charge

to the samples-fig 3a (26)); a measuring probe connected to a voltmeter for measuring electrostatic potentials (pg 12 para 107 line 1-5); a computer for handling outgoing and incoming data (pg 9 para 90 lines 10-25).

In regard to claim 22, Seaver et al. discloses a means for post-treatment of the samples, wherein the means is a UV-curing means (pg 12 para 110 line 1-11).

6. Claims 10-12 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seaver et al. (US Pub 2002/0192360) in view of Vanmaele et al. (EP 1243409).

In regard to claim 10, Seaver et al. discloses all that is disclosed in claim 1.

Seaver et al. lacks wherein an array of samples are evaluated and therefore lacks measuring sequentially the charge of the array of samples.

Vanmaele et al. teaches variants of multi-layered materials including film (pg 2 line 43-49) that are screened for useful electric properties by presenting an array of various coated materials (pg 2 line 57 – pg 3 line 6).

It would have been obvious to one with ordinary skill in the art at the time the invention was made for Seaver et al. to use an array of samples while evaluating properties of the material as taught by Vanmaele et al. in order to scan for useful properties in several variants of multilayered materials (pg 2 line 57-58), also with the addition of the array of samples, because Seaver et al. discloses a single voltmeter with a probe, measurements must be done sequentially, as only one sample can be measured at a time.

In regard to claim 11, Seaver et al. discloses where the apparatus has a means for post-treatment, wherein the post-treatment comprises UV-curing step (pg 12 para 110 line 1-11).

In regard to claims 12 and 28, Seaver et al. contains wherein statistical calculations are performed on the samples (fig 20).

Seaver et al. lacks wherein the samples are in an array so that each different sample is present in at least two rows and two columns.

Vanmaele et al. teaches variants of multi-layered materials including film (pg 2 line 43-49) that are disposed in an array (pg 2 line 57 – pg 3 line 6; figs 2 and 3).

It would have been obvious to one with ordinary skill in the art at the time the invention was made for Seaver et al. to have different test samples present in at least two columns and two rows as taught by Vanmaele et al. in order to scan for useful properties in several variants of multilayered materials (pg 2 line 57-58).

### ***Response to Arguments***

7. Applicant's arguments with respect to claims 1-28 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

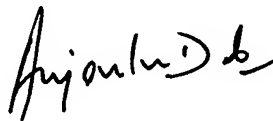
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff Natalini whose telephone number is 571-272-2266. The examiner can normally be reached on M-F 8-5.



If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diane Lee can be reached on 571-272-2399. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jeff Natalini



**ANJAN DEB**  
**PRIMARY EXAMINER**